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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,771	12/02/2003	Arjan Duresi	18525.04069	4198
24024	7590	10/06/2005	EXAMINER	
CALFEE HALTER & GRISWOLD, LLP 800 SUPERIOR AVENUE SUITE 1400 CLEVELAND, OH 44114			NGUYEN, TU T	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

✓

**Office Action Summary**

Application No.

10/726,771

Applicant(s)

DURRESI ET AL.

Examiner

Tu T. Nguyen

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 July 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-20 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

The disclosure is objected to because of the following informalities:

The symbol "τ" should be defined.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7,9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida (5,767,956) in view of Wight et al (6,734,955).

With respect to claims 1,14,19, Yoshida discloses a method for determining a quality of an optical fiber (abstract, line 3, "detecting deterioration"). The method comprises: identifying a known signal (column 3, lines 50-52 "a generated signal"); transmitting and receiving the signal over an optical fiber (column 3, lines 59-60, "detector"); comparing the received signal to the known signal using optical correlation (column 3, lines 55-67); measuring a position of a failure point (column 5, lines 45-50).

Yoshida discloses detecting the deterioration (or the quality) of the fiber (abstract). However, Yoshida does not explicitly disclose a how to detecting the quality of the fiber link as claimed. Wight discloses a method for detecting a quality of an optical link. The method comprises: measuring dispersion of a link (abstract) by comparing and

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correlating an optical signal (abstract). It would have been obvious to modify Yoshida by detecting the dispersion (or quality) of the optical link as taught by Wight to facilitate the data transferring.

Wight does not explicitly disclose determining the quality of signal of the link. Since Wight discloses measuring dispersion of the link (abstract), it would have been obvious that Wight would have to determine the quality of signal of the link in order to determine the dispersion of the link.

With respect to claims 2-3, Yoshida does not disclose the claimed correlating methods. However, it would have been obvious to modify Yoshida with different correlating methods for detecting different characteristics of the optical link.

With respect to claims 4-7, 16-18, it would have been obvious a design choice to modify Yoshida to detect the characteristics of the link as claimed for different testing purposes.

With respect to claims 9-10, 20, Yoshida does not disclose the claimed bit periods. However, it would have been obvious to modify Yoshida to complete the correlation in the claimed periods for using the system in different environments.

With respect to claims 11-13, Yoshida discloses determining deterioration of the fiber by evaluating the shape of the correlation (fig 5A, fig 5B and fig 7). However,

Yoshida does not disclose the claimed evaluating method. It would have been obvious to modify Yoshida with the evaluating method as claimed for using the system with different types of links.

With respect to claim 15, Yoshida discloses the claimed electronic signal correlation (column 3, lines 60-65).

***Allowable Subject Matter***

Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior arts of record do not disclose a method for determining a quality of an optical link. The method comprises: the receiving method as claimed in claim 8 in combination with all the limitations in the base claim.

***Response to Arguments***

Applicant's arguments filed 07/11/2005 have been fully considered but they are not persuasive.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu T. Nguyen whose telephone number is (571) 272-2424. The examiner can normally be reached on T-F 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Toatley Jr. can be reached on (571) 272-2800 Ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Tu T. Nguyen', with a long, sweeping horizontal stroke extending to the right.

Tu T. Nguyen  
Primary Examiner  
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09/28/2005